

REMARKS

This paper responds to the office action mailed November 5, 2003 ("the office action"). Claims 9 and 11 have been amended herein; claims 1-21 are currently pending. Claim 9 has been amended to correct an informal error noted in section 8 of the office action. Claim 11 has been amended to correct a typographical error. Applicants respectfully request reconsideration of the present application in light of the foregoing amendments and the following remarks.

Priority

The office action noted that the declaration claims the benefit of provisional application 60/208,617 under 35 USC 120, rather than section 119. An application data sheet has been provided, including a domestic priority claim under 35 USC 119 in accordance with 37 CFR 1.76(b)(5).

Drawings

Sections 2 and 3 of the office action objected to the drawings under 37 CFR 1.83(a) regarding the inverter controller. A proposed new Figure 5 is provided, showing the inverter controllers. The specification has been amended to make it consistent with the proposed changes to Figure 5. No new matter has been introduced via the proposed drawing amendment, as the amendment merely graphically illustrates that which is described verbally in the specification.

Section 4 of the office action objected to the drawings under 37 CFR 1.84(p)(5) for including reference signs not mentioned in the specification. Proposed new Figures 3 and 4 are provided, in which reference numbers 305, 306 and 407 are deleted.

Section 5 of the office action objected to the drawings under 37 CFR 1.84(p)(5) because the drawings did not include certain reference signs mentioned in the specification. Proposed new Figures 7 and 9 are provided, in which reference numbers 705 and 905 have been added.

Specification

Section 7 of the office action noted informal errors in the specification. The Examiner's careful review of the specification is appreciated. The errors highlighted in section 7 have been corrected herein. In section 6 of the office action, the Examiner requested reviewing the specification for idiomatic and grammatical errors. Additional informal errors have been corrected in the specification amendments herein.

Claim Objections

Section 8 of the office action states that the phrase "the second inverter" in claim 4 does not appear to have antecedent basis. As filed, the "second inverter" element is introduced in the preamble to claim 4: "The method of claim 3 wherein the UPS comprises *a second inverter*...." The recitation of "a second inverter" in the preamble to claim 4 provides the antecedent for "the second inverter" recited on line 3 of the claim.

Claim 9 has been amended to correct the informal error noted in section 8 of the office action.

Accordingly, Applicants believe the claim objections have been overcome.

Claim Rejections - 35 USC § 102

Sections 9-10 of the office action rejected claims 1, 3, 5, 6 and 10 under 35 USC 102(b) as allegedly being anticipated by U.S. Patent No. 4,782,241 to Baker et al ("Baker"). Applicants respectfully traverse this rejection.

It is well accepted that, to anticipate a claim, the prior art reference must disclose each element of the claim. More specifically, "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Applicants respectfully contend Baker fails to disclose each claimed element.

Claim 1 recites, among other things,

"an inverter controller that, upon detection of an input power source fault causing an input voltage magnitude increase, controls the inverter to generate on the input bus a voltage of the same polarity and greater magnitude than the input voltage, thereby commutating the utility disconnect static switch."

Claims 3 and 10 recite methods each including a similar limitation. Both claim 3 and claim 10 include controlling an inverter to "generate on the output terminal of the utility disconnect static switch a voltage having a polarity the same as and a magnitude greater than the faulted input voltage, thereby commutating the static switch."

Regarding this claim element, the office action refers to the inverter controller (154) shown in Figure 2C of Baker. However, there is no disclosure or suggestion in Baker of the inverter controller 154 controlling the inverter to generate on the input bus a voltage of the same polarity and greater magnitude than the input voltage to commutating the utility disconnect static switch.

In Baker, the operation and function of the inverter 106, which is controlled by the inverter controller 154, is described as follows:

"Inverter 106 is of somewhat elementary design, inasmuch as it provides no regulation of the output other than supplying a squarewave at the designated frequency of the system. The rails or bus structure of the inverter 106 are charged when it is in a stand-by state to a voltage level selected just slightly higher than the peak voltage supplied from the line source or utility at 72. This pre-charging functions to facilitate transfer of the power flow to the battery-inverter path when necessary. The pre-charge is developed from line grouping 84 in FIG. 2B at line grouping 108 labelled "PRECHR" which, again is seen in that figure leading to a pre-charge circuit represented at block 110. This circuit functions to appropriately adjust the voltage values for the three phases and rectify them for presentation to the inverter rails via line grouping 112 incorporating resistor grouping R1."

Baker at col. 8, l. 58-col. 9, l. 6.

Hence, the inverter 106 is described in terms of providing an output to a load, receiving DC voltage from the battery 122 and providing a squarewave output at a designated frequency.

The inverter driver 150 and inverter drive logic 154 of Baker function to drive the inverter to achieve the desired inverter output voltage:

"The inverter 106 switching function is actuated from an inverter driver circuit represented at block 150 via line grouping 152. Driver circuit 150 provides appropriate isolation for the switching function and preferably is that described in U.S. Pat. No. 4,575,668 entitled "Controller for Providing PWM Drive to an A.C. Motor" by R.W. Baker, issued Mar. 11, 1986, assigned in common herewith and incorporated herein by reference. The circuit represented at 150, in turn, is controlled from an inverter drive logic network represented at block 154 through an association represented by three-line grouping 156. Network 154, in turn, is enabled from a drive enable network represented at block 158 through an input signal at line 160. The oscillatory signal input to the inverter drive logic network 154, which ultimately is employed to drive the inverter 106, is developed along three-line grouping 162 and is normally derived from an inverter oscillator performing in conjunction with a phase lock network, the combination being represented in general in FIG. 2A at 164.

Baker at col. 9, ll. 35-55. As shown by the foregoing passage from Baker, the inverter driver receives an oscillatory signal to control the inverter to achieve the desired output voltage signal.

The office fails to identify any disclosure or suggestion in Baker of controlling the inverter to "generate on the input bus a voltage of the same polarity and greater magnitude than the input voltage" in response to detecting an input voltage magnitude increase to commutate the utility disconnect static switch. Since Baker fails to disclose, or even suggest this claim element,

Applicants respectfully submit that Baker cannot anticipate claims 1, 3 and 10, or any of the claims depending therefrom.

Allowable Subject Matter

Section 11 of the office action noted that claims 11-21 were allowed, and section 12 stated that claims 2, 4 and 7-9 would be allowable if rewritten in independent form. The Examiner's acknowledgement of the allowable subject matter is appreciated.

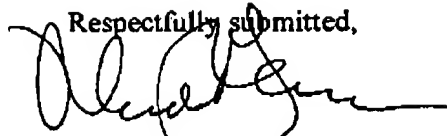
Claims 2 and 4 depend from claims 1 and 3, respectively. As noted above, claims 1 and 3 are believed to be allowable over Baker; therefore, claims 2 and 4 are also in condition for allowance. Claims 7 and 8 also ultimately depend from 3 and thus are also in condition for allowance.

Claim 9, as filed, is an independent claim. Since the objection regarding claim 9 raised in section 8 of the office action has been addressed by the amendment to claim 9, claim 9 is believed to be proper for allowance.

Conclusion

As evidenced by the foregoing amendments and remarks, Applicants have made a genuine effort to respond to each issue raised in the office action. All of the pending claims are believed to be proper for allowance. The Examiner is invited to contact the undersigned attorney at 952.474.3701 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,



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